

Docket No.: P-0269

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Jong HyunWOO

Serial No.: 09/972,876

**EXPEDITED PROCEDURE
UNDER 37 C.F.R. §1.116**

Confirmation No.: 5601

Group Art Unit: 2673

Filed: October 10, 2001

Examiner: V. Shankar

For: APPARATUS AND METHOD FOR REDUCTING POWER CONSUMPTION OF
LCD BACKLIGHT LAMP

Customer No.: 34610

U.S. Patent and Trademark Office
2011 South Clark Place
Customer Window, Mail Stop AF
Crystal Plaza Two, Lobby, Room 1B03
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Sir:

In response to the Final Office Action dated March 10, 2004, the date for reply having been extended by a Petition for Extension of Time filed herewith, reconsideration of the rejections set forth therein is requested as follows:

Claims 1-4 and 6-19 are pending.

The Examiner is thanked for the courtesies extended to Applicant's representative at the June 16, 2004 personal interview. The points discussed are incorporated herein.

The Examiner is further thanked for the indication that claim 15 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening

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claims. However, for the reasons set forth below, claim 15 has not been rewritten in independent form at this time.

The Office Action rejected claims 1-4, 6-14, and 16-19 under 35 U.S.C. §103(a) as being anticipated by Mitchell et al. (hereinafter "Mitchell"), U.S. Patent No. 5,272,327 in view of Cortopassi, U.S. Patent No. 5,996,082. The rejection is respectfully traversed.

Mitchell discloses a constant brightness liquid crystal display backlight control system. Mitchell teaches controlling the current to a lamp 10 from power circuitry 2 by controlling a pulse width modulated (PWM) signal generated by backlight control circuitry 24. The PWM signal is controlled in two ways. First, a brightness potentiometer 80 controlled by the user regulates the PWM signal to the power circuitry 22. The brightness potentiometer 80 is a manually adjustable resistor, which the user can operate to brighten or dim the display. Second, a resistance of a photoresistor 20, which varies in accordance with the intensity of the light generated by the lamp 10, affects the PWM signal and stabilizes the intensity of the light generated by the lamp at the level set by the potentiometer 80. See column 3, lines 33-48 of Mitchell. However, as discussed at the personal interview, Mitchell does not disclose or suggest an apparatus for reducing power consumption of a backlight lamp in a LCD (Liquid Crystal Display), wherein, when the LCD is turned on or a wake up operation is activated after a suspend mode, the control unit is configured to control the brightness adjustment information signal so as to be similar to a brightness increase curve of the backlight lamp such that power supplied to the backlight lamp is gradually increased over time, as recited in independent claim 1.

Further, Mitchell does not disclose or suggest a method for saving power of a backlight lamp in a LCD (Liquid Crystal Display) comprising, *inter alia*, outputting a brightness control information signal to an inverter unit corresponding to a brightness information value, wherein, when the LCD is turned on or a wake up operation is activated after a suspend mode, the brightness information value gradually increases over a predetermined time period in consideration of luminescent characteristics of a backlight lamp such that power supplied to the backlight lamp is gradually increased over time, as recited in independent claim 11.

The Examiner acknowledges these deficiencies in Mitchell, but then applies Cortopassi, arguing that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Cortopassi into Mitchell for better control of power management." However, as discussed at the personal interview, Cortopassi merely teaches providing power management of the battery of a PC in response to a wake-up signal. Nowhere in the disclosure referred to by the Examiner, or in the entire disclosure, does Cortopassi disclose or suggest controlling a brightness adjustment signal so as to be similar to the brightness increase curve of the backlight lamp such that power is gradually increased over time, or that the brightness information value is gradually increased over a predetermined time period in consideration of luminescent characteristics of a backlight lamp such that power supplied to the backlight lamp is gradually increased over time. If the Examiner disagrees, he is requested to refer to specific language in the Cortopassi disclosure disclosing these claimed features.

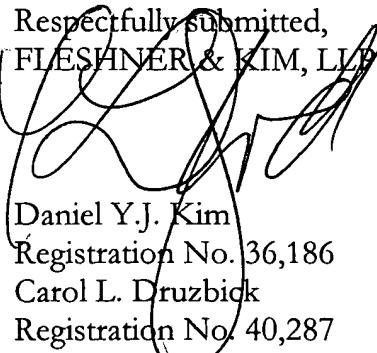
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Accordingly, the rejection of independent claims 1 and 11 over Mitchell and Cortopassi should be withdrawn. Dependent claims 2-4, 6-10, 12-14, and 16-19, as well as objected claim 15, are allowable at least for the reasons discussed above with respect to independent claims 1 and 11, from which they respectively depend, as well as for their added features.

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, Carol L. Druzwick, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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